

(12) UK Patent Application (19) GB (11) 2 232 587 (13) A

(43) Date of A publication 19.12.1990

(21) Application No 8913676.6

(22) Date of filing 14.06.1989

(71) Applicant  
Woodrow R Williams  
45 Birrell House, Irving Grove, Stockwell Road,  
Stockwell, London, SW9, United Kingdom

(72) Inventor  
Woodrow R Williams

(74) Agent and/or Address for Service  
W H Beck, Greener & Co  
7 Stone Buildings, Lincoln's Inn, London, WC2A 3SZ,  
United Kingdom

(51) INT CL<sup>5</sup>  
A61K 7/48

(52) UK CL (Edition K)  
A4V V29A

(56) Documents cited  
GB 0801260 A GB 0474102 A JP 60246309 A  
JP 60032707 A US 4287214 A US 4197316 A

(58) Field of search  
UK CL (Edition K) A4V, A5B  
INT CL<sup>5</sup> A61K  
Online database: WPI

(54) A method of cosmetic treatment

(57) A method of cosmetic treatment for the skin comprises applying steam to the skin for a predetermined period, and then applying a hydroxy-tricarboxylic acid to the skin, either alone or in composition which is left on the skin for a predetermined period and is then removed. It has been found that using such an acid, or a composition containing it, on the face in the presence of steam tightens up the skin, and gets rid of lines and wrinkles and bags around the eyes. It also softens the skin, heals any scar tissue and removes acne and spots. The acid is also able to remove facial hair and reduce fatty tissue. Preferably, the acid is citric acid in the form of lime juice and/or lemon juice.

A METHOD OF COSMETIC TREATMENT

The present invention relates to a method of cosmetic treatment and to the use of  
05 hydroxy-tricarboxylic acid, either alone or in composition, as a cosmetic product for the skin or for use in a method of treating a human or animal body.

According to a first aspect of the present  
10 invention there is provided a method of cosmetic treatment for the skin of a human or animal, comprising the steps of applying steam to the skin for a first predetermined period, applying a hydroxy-tricarboxylic acid or a composition containing a hydroxy-tricarboxylic  
15 acid to the skin, leaving the acid or composition on the skin for a second predetermined period, and then removing the acid or composition from the skin.

Preferably, during said second predetermined period  
20 steam is also applied to said skin.

Steam may be applied to the skin by way of the skin being in the steamy atmosphere of a bathroom or the like, or by way of a sauna or steam room. It is also  
25 possible to apply the steam to the skin more directly, for example, by way of a steam bowl or basin. Generally, the more directed the application of steam, the shorter are said first and second predetermined periods. For example, said first predetermined period  
30 is preferably in the range 1 minute to 5 minutes. Said second predetermined period is preferably in the range 45 seconds to 4 minutes. Where direct application of steam, by way, for example, of steam bowl is provided said second predetermined period is preferably in the  
35 range 45 seconds to 2 minutes. In this instance, the first predetermined period would be preferably between 1 and 2 minutes.

In a preferred embodiment, the method further comprises the step of applying steam to the skin for a third predetermined period after the acid or composition has been removed.

05

Again, the length of said third predetermined period is generally varied in accordance with the method by which steam is applied to the skin. Where the method is directed, for example, by use of a steam bowl, the third predetermined period is generally within the range 1 to 2 minutes. By contrast, if the steam is applied by being in a steamy atmosphere, for example, by being in a bathroom, said third predetermined period is increased and may be up to 2 hours.

15

In an embodiment the acid, used alone or in a composition, is citric acid. The citric acid may be naturally occurring or synthesised. In a particularly preferred embodiment, the juice of one or more types of fruit is used, either alone or in a composition. Preferably, the acid or composition applied to the skin is in the form of, or contains, lime juice and/or lemon juice. Presently, the juice of a lemon has been found to be the most efficacious. It has also been found beneficial to apply the lemon juice onto the skin by rubbing a half a lemon across the skin. Of course, surface stimulation of the skin can alternatively be achieved by rubbing the skin during or after application of the acid or composition with any suitable means.

30

The present invention also extends to the use of a hydroxy-tricarboxylic acid, either alone or in composition, as a cosmetic product for the skin.

35

According to a further aspect of the invention there is provided a hydroxy-tricarboxylic acid, either

alone or in composition, for use in a method of treatment of a human or animal body by therapy practised on the human or animal body.

05        Said acid or said composition is preferably used in the presence of steam.

10        In an embodiment the acid, used alone or in a composition, is citric acid. The citric acid may be naturally occurring or synthesised. In a particularly preferred embodiment, the juice of one or more types of fruit is used, either alone or in a composition. Preferably, the acid or composition applied to the skin is in the form of, or contains, lime juice and/or lemon juice. Presently, the juice of a lemon has been found to be the most efficacious. It has also been found beneficial to apply the lemon juice onto the skin by rubbing a half a lemon across the skin. Of course, surface stimulation of the skin can alternatively be achieved by rubbing the skin during or after application of the acid or composition with any suitable means.

25        The invention will now be more particularly described by way of a number of examples showing the use particularly of citric acid in the form of lime juice and/or lemon juice as a treatment for the skin. It has been found that using such an acid, or a composition containing it, on the face in the presence of steam tightens up the skin, and gets rid of lines and wrinkles and bags around the eyes. It also softens the skin, heals any scar tissue and removes acne and spots. The acid is also able to remove facial hair and reduce fatty tissue.

35        The acid, or a composition containing it can also be used on the body, rather than the face, where again

it removes lines and wrinkles, softens the skin,  
dissolves fatty tissue, cleans spots and tightens up the  
skin.

05

EXAMPLE 1

10

15

The facial skin of a person was thoroughly cleansed  
and the person sat in a hot bath with a reasonable  
amount of hot water for 5 minutes. Thereafter, the cut  
half of a lemon was rubbed over the skin of the face to  
cover the facial skin evenly with juice from the lemon  
from forehead to lower neck. Particular care was taken  
to ensure that the upper and lower eyelids were covered  
with the juice, but the juice was removed using a damp  
cloth from the eyebrows.

20

The juice was left in contact with the skin for  
between 3 to 4 minutes. In this respect, it has been  
found that after 4 minutes the juice begins to damage  
the skin and that in these circumstances the juice  
should not be left on the skin for more than 5 minutes.

25

After the 3 to 4 minute period, the juice was  
removed from the skin by washing with plenty of fresh  
water. The person then remained in the hot bath for  
between 30 minutes and 2 hours, and during this time hot  
water was periodically added to the bath to keep a  
reasonable level of steam in the bathroom.

30

35

It was found that the person's skin after this  
treatment was tightened, that lines and any scars were  
improved as were bags under the eyes. Any acne and  
spots were cleared, facial hair was removed and fatty  
tissue was reduced. The effect was to soften the skin  
overall and there was no loss of elasticity. It was  
found that the effect lasted for between one to three  
weeks.

EXAMPLE 2

Generally, the same procedure was used except the person was in a steam room or sauna. Again, the person  
05 remained in the sauna for about 5 minutes before applying the lemon juice to the face by rubbing the cut lemon half thereover. This time, the juice was left on the face for only 2 minutes and was then washed off. The person remained in the steam room or sauna for a  
10 further 5 minutes. The benefits outlined in Example 1 were achieved.

It has been found that after the 5 minutes in steam after the juice has been removed the process can be  
15 repeated once or twice. The process cannot be repeated a further time without damage to the skin.

Again, the benefits were seen to last for between one and three weeks.  
20

EXAMPLE 3

A similar procedure to that outlined in Examples 1 and 2 was followed, but in this case steam was  
25 initially applied to the skin of the face by way of a steam bowl. In this respect, the face was held over a bowl of steaming water with a towel held over the head and the bowl to direct the steam directly onto the face. The steam was applied initially in this manner to the  
30 face for 2 minutes.

The skin was then rubbed with the cut half of a lemon continuously for 1½ minutes and then the juice applied was washed off with plenty of fresh water. The  
35 face was then positioned over the steam bowl for a further 2 minutes. Again, the benefits outlined in

Example 1 were achieved.

05 With the steam bowl technique repetition of the process once or twice is possible, although it is advisable to leave at least 3 to 4 minutes between successive treatments.

EXAMPLE 4

10 After an initial application of steam to the facial skin, for example, by any of the means described above in connection with Examples 1, 2 or 3, the cut half of a lemon is applied to the skin in downward strokes for a second predetermined period. If the person is in the  
15 bath this period would be of the order of 2 minutes, in a sauna of the order of 1½ minutes, and over a steam bowl, of the order of 1½ minutes. The juice is then washed from the skin and a further application of steam, for example, of up to 5 minutes is applied to the face.  
20 This removes fatty tissue, heals any scar marks on the skin, gets rid of facial lines and wrinkles, softens the skin, and cleans up acne or spots.

EXAMPLE 5

25 Where it is required to tighten up the skin of the whole body this can be done by soaking in a hot bath for some time. The still wet skin is then rubbed all over with lemon juice for between 45 seconds to 1 minute.  
30 Thereafter, the skin is washed thoroughly.

This process will tighten up the skin even more if the lemon is rubbed onto the skin for between 1 and 1½ minutes in a steam room. Once the juice has been  
35 thoroughly washed off, the body remains in the steam room for 15 to 30 minutes.

If a steam room is available this process can be undertaken without an initial bath. In this respect, the body remains in the steam room for 5 to 10 minutes before the lemon juice is applied.

05

It has been found that a number of methods of using the product on the whole body in conjunction with a bath or a steam room can be promulgated. Generally, the  
10 lemon juice is not applied to the skin of the body until after a predetermined first period, which would normally be no less than 30 minutes soaking in a bath or 5 minutes in a sauna. Thereafter, the juice is applied to the skin of the body. It has been found that if the  
15 body is in a sauna and the juice is left on the skin for 1 minute it will smooth the skin and remove lines. Leaving the juice on the skin for 1½ minutes additionally causes tightening of the skin, the dissolving of fatty tissue, the removal of spots and  
20 scars and toning of the body.

If the juice is used in a bathroom, and is left on the skin for between 45 seconds and 1 minute this has been found to soften the skin and tighten it, to remove  
25 lines and spots and to remove scars and generally tone the skin. If in a bathroom and the lemon juice is left on the skin for 1½ minutes, fatty tissue is dissolved.

It has also been found that the treatments  
30 described above, which were developed for cosmetic purposes, do have medical uses. In particular, the treatments described remove bruises, generally in one to three days after use and can be used to prevent the formation of bruises if used quickly after a bruise  
35 forming incident. The treatment will also take the swelling of black eyes and out of burns and the swelling



caused by skin grafts.

05       The examples given above all involve the  
application of lemon juice to the skin by rubbing the  
skin with the cut half of a lemon. However, juices from  
other citrus fruits may be applied, and/or compositions  
containing citric acid may be formulated. Where the  
composition is liquid it may be applied using the  
10       fingers or a brush, or by way of means, such as a cloth  
or hard sponge, arranged to provide surface stimulation  
of the skin.

15       It will be appreciated that other modifications in  
and variations of the invention as described above are  
possible within the scope of the invention.

20

25

30

35

CLAIMS

1. A method of cosmetic treatment for the skin of a human or animal, comprising the steps of applying steam to the skin for a first predetermined period, applying a hydroxy-tricarboxylic acid or a composition containing a hydroxy-tricarboxylic acid to the skin, leaving the acid or composition on the skin for a second predetermined period, and then removing the acid or composition from the skin.

2. A method as claimed in Claim 1, wherein during said second predetermined period steam is also applied to said skin.

3. A method as claimed in Claim 1 or 2, wherein said first predetermined period is in the range 1 minute to 5 minutes.

4. A method as claimed in any preceding claim, wherein said second predetermined period is in the range 45 seconds to 4 minutes.

5. A method as claimed in Claim 4, where, during said first predetermined period steam has been directly applied to the skin, wherein said second predetermined period is preferably in the range 45 seconds to 2 minutes.

6. A method as claimed in Claim 5, wherein said first predetermined period is between 1 and 2 minutes.

7. A method as claimed in any preceding claim, further comprising the step of applying steam to the skin for a third predetermined period after the acid or composition

has been removed.

05 8. A method as claimed in Claim 7, wherein the length  
of said third predetermined period is varied in  
accordance with the method by which steam is applied to  
the skin.

10 9. A method as claimed in Claim 7 or 8, wherein said  
third predetermined period is up to 2 hours.

15 10. A method as claimed in Claim 7 or 8, where steam is  
directly applied to the skin during said third  
predetermined period, and wherein said third  
predetermined period is within the range 1 to 2 minutes.

20 11. A method as claimed in any preceding claim, wherein  
the acid, used alone or in a composition, is citric  
acid.

25 12. A method as claimed in Claim 11, wherein the juice  
of one or more types of fruit is used, either alone or  
in a composition.

30 13. A method as claimed in any preceding claim, wherein  
the acid or composition applied to the skin is in the  
form of, or contains, lime juice and/or lemon juice.

35 14. A method as claimed in any preceding claim, further  
comprising the step of surface stimulation of the skin  
by rubbing the skin during or after application of the  
acid or composition.

15 15. The use of a hydroxy-tricarboxylic acid, either  
alone or in composition, as a cosmetic product for the

skin.

16. A hydroxy-tricarboxylic acid, either alone or in composition, for use in a method of treatment of a human or animal body by therapy practised on the human or animal body.

17. A cosmetic product comprising a hydroxy-tricarboxylic acid, either alone or in a composition, wherein the acid is citric acid.

18. A cosmetic product as claimed in Claim 17, comprising the juice of one or more types of fruit, either alone or in a composition.

19. A cosmetic product as claimed in Claim 17, wherein the acid or composition is in the form of, or contains, lime juice and/or lemon juice.

20. A method of cosmetic treatment for the skin of a human or animal substantially as hereinbefore described with reference to the examples.

21. The use of a hydroxy-tricarboxylic acid, either alone or in composition, substantially as hereinbefore described with reference to the examples.

22. A cosmetic product substantially as hereinbefore described with reference to the examples.